Dredging Committee Updated 7-6-15

(Information to gather)

1. What research has Land and Lakes produced that will help?
   The land and lakes committee has researched many target areas within the Lake Camelot association. We will use this information to determine possible projects and ultimately come up repairs which will go out for bid after all the research is done.

2. What were the lake and cove depths at best 20 years ago?
   The 2014 Hydrographic and Sediment Survey shows we have 51, 365 cubic yards of sediment in the orange target areas. 16,976 cubic yards in the upper lake and 34,389 in the lower lake.

3. Where can we get to dredging them today?
   We will be putting a dredging plan together to identify which area will truly benefit by dredging. This will all come down to cost vs benefit to lakes and water quality.

4. Mechanical or Hydraulic dredging? How did we do it 20 years ago?
   Original dredging was primarily done with a hydraulic dredge. The siltation ponds were dug out mechanically with excavators.

5. How will the old maps and 16K study assist in the process?
   From our research completed to date, we have learned that the study will identify which areas of silt removal are critical. This is determined by water depth after dredging, lake usage affected by silt, and water quality.

6. What erosion control plans on Lake Camelot Property do we need to address long term?
   We are working with Peoria Soil and Water to identify problem areas. We are also researching possibly hiring a dredging and erosion consultant to identify areas using the siltation survey. We will study all of the coves and ultimately come up with a lake management plan (long term) which will fix the erosion problems and complete the dredging project.

7. Where does/should the silt go? How much will there be?
   Right now we are researching which type of dredging we will be doing. This will determine how we will store the silt. Hydraulic dredging is the most common form of dredging, which pumps the silt to a dewatering pond. We are identifying possible pond locations, and beginning to talk to surrounding land owners.

8. What environmental issues, permits, etc. do we need to be aware of?
   We will need at a minimum, an EPA permit. Pending how the dredging affects existing waterways and possible dewatering pond locations, we may also need permits from the DNR and the Army Corp of Engineers. We need a dredging plan prior to identifying required permits.

9. When is the best time to start?
   Ideally when the sediment can dry the fastest. We will also look at times when the dredging will least affect lake usage by association members.

10. What dredging companies should we look at bidding?
    Thru our initial investigation, we found that we need to come up a dredging plan. We are looking into hiring a consultant to help put that plan together. This plan will be a specific plan that will be given out to several dredging companies which will go thru a bidding process. A consultant will identify which companies will best serve our interests and needs.

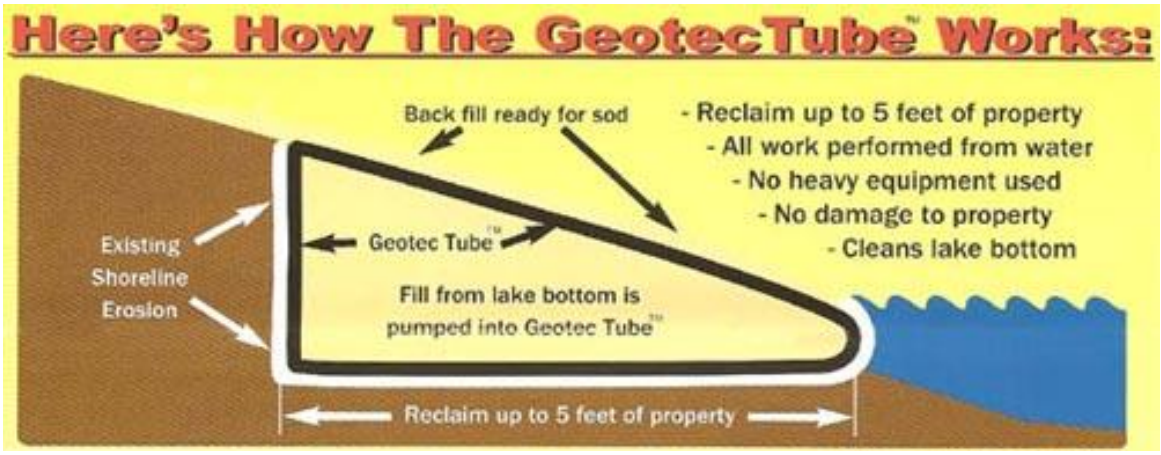
11. What is our scope of work for the dredging companies?
    We are investigating hiring a dredging consultant who would put a dredging plan, or also called a work scope together to pass on to several dredging companies who will be given the chance to bid on the project.

12. What is the cost to Lake Camelot RTA? How do we pay for it?
    We are months away from coming up with specific dollar amounts it will cost to complete our dredging and erosion control project. One of our projects inside the committee will be identifying possible bank loans, municipal bonds, special assessments, dues etc… It will all be looked at to determine the best option for our association. At this time "NO" decision has been made and we are only in the beginning stages of looking at each one of the options. Please be patient.

13. How will this impact our community?
    During the time of dredging the lakes will have some of its use limited. There will be possible road delays from erosion and dredging companies. The benefit of cleaner lakes in the future and less erosion in the lakes will far outweigh the minor inconvenience we incur during the dredging project. Over time we will develop a lake management plan. This will increase water quality and allow us to use fewer chemicals for weed control. Ultimately water and lake quality will increase, which will positively impact all of our property values.

    Sample Erosion Methods Used


CVTA
Vermont Youth Conservation Corps and Cross Vermont Trail Association installed
check dams and riprap to prevent nonpoint source pollution to the Winooski River


Here's How The GeotecTube™ Works:
Back fill ready for sod
- Reclaim up to 5 feet of property
- All work performed from water
- No heavy equipment used
- No damage to property
- Cleans lake bottom
Existing
Shoreline
Erosion
Geotec Tube™
Fill from lake bottom is
pumped into Geotec Tube™
Reclaim up to 5 feet of property


≥1:1
5'
2:1<1:1
10'
>4:1<2:1
17'
6:1–4:1
25'
<6:1
50'
SLOPE GRADIENT
ROLL SPACING